IN THE DRAWINGS

In Paragraph 2 of the Office Action, the Examiner has requested that Figure 2 be designated by a legend such as --Prior Art--. In response, Applicant has revised Figure 2 to include a legend stating --(Prior Art)-- immediately below --Figure 2--. A marked-up copy of Figure 2 is attached in the Appendix as a courtesy.

In addition, Applicant requests that Figure 3A be revised. Figure 3A should be amended to include a reference number –320--for the groove. This is not new matter, as a groove is described for Figure 3A in Para. 0023 of the application. A marked-up copy of Figure 3A is attached in the Appendix as a courtesy.

IN THE SPECIFICATION

Please replace Para. 0019 with the following paragraph:

[0019] The base and top cover arrangement shown in FIG. 1 is common in the industry. However, other arrangements of the housing components have been frequently used, and the invention is not limited to the configuration of the disc drive housing. For example, disc drives have been manufactured using a vertical split between two housing members. In such drives, that portion of the housing half that connects to the lower end of the spindle motor is analogous to base 12, while the opposite side of the same housing member, that is connected to or adjacent the top of the spindle motor, is functionally the same as the top cover [[24]] 14.

Please replace Para. 0020 with the following paragraph:

[0020] Disc drive 10 further includes a disc pack 16 that is mounted for rotation on a spindle motor (not shown) by a disc clamp [[14]] 18. Disc pack 16 includes one or more individual discs that are mounted for co-rotation about a central axis. Each disc surface has an associated head 20 that is mounted to disc drive 10 for communicating with the disc surface. In the example shown in FIG. 1, heads 20 are supported by flexures 22 that are in turn attached to head mounting arms [[18]] 24 of an actuator body 26. The actuator shown in FIG. 1 is of the type known as a rotary moving coil actuator and includes a voice coil motor (VCM), shown generally at 28. Voice coil motor 28 rotates actuator body 26 with its attached heads 20 about a pivot shaft 30 to position heads 20 over a desired data track along an arcuate path 32. While a rotary actuator is shown in FIG. 1, the invention is also useful in disc drives having other types of actuators, such as linear actuators.

Please replace Para. 0021 with the following paragraph:

[0021] FIG. 2 shows a rotating shaft 100 spindle motor design in which the shaft 100 is integrated with the hub 102 which carries flange 103 which functions

as a disc support surface. The shaft 100 with the hub 102 supports a magnet 104 on its inner axial surface, facing stator 106 whose energization causes stable rotation of the hub. The stator 106 in turn is supported on an axial extension 108 of base casting 110. A sleeve 112 which supports the shaft 100 and its associated thrust plate 116 is incorporated into the axial extension 108 of the base 110. This sleeve 112 has axial surface 120 that faces a surface of the shaft 100. These two surfaces define a journal bearing which is of standard design and not further shown. Further, the thrust plate 116 at surfaces 122 and [[124]] 134 define in cooperation with the sleeve 112 and the counterplate 130 thrust bearings of the fluid dynamic type which further support the shaft 100 against axial forces. Each of these journal 120 and thrust 122, 134 bearings require fluid in the gaps between the facing surfaces. This fluid may either recirculate through ~~an internal channel~~ the thrust bearing 134 which either passes through the thrust plate 116 or between the thrust plate 116 and shaft 100, or through a central bore (not shown). To prevent the escape of any fluid between the surface 140 of the sleeve 100 and the complementary surface 142 of the ~~thrust plate~~ counterplate 130, a laser weld has been applied at the junction at the axially outer edge of the counter plate 130 and the sleeve 112. This laser weld is applied using well-known techniques and technology but by its very simplicity enhances the reliability.

Please replace Para. 0023 with the following paragraph:

[0023] The succeeding figures show a plurality of solutions to eliminate counterplate distortion from fluid bearing design due to laser welding. Referring for example to FIG. 3A, we see an example wherein a groove 320 is cut at the weld interface 300 into both the counterplate 302 and the radially inner edge of the shoulder 304 of sleeve 306. Preferably, the groove depth should be about half of the counterplate thickness. Further, as is shown, the radial width of the groove 320 as cut into the shoulder 304 is about half of the total width 310 of the sleeve 306. Testing has demonstrated that this is highly effective in relieving the

stress imposed by the weld 300 at the seam 315 between counterplate 302 and sleeve 306.

Please replace Para. 0024 with the following paragraph:

[0024] In an alternative shown in FIG. 3B, a groove 320 is cut into the interface between counterplate 302 and sleeve 306 at the gap or seam 315. In this case, rather than cutting a rectangular cross-sectional groove into the shoulder 304 of the sleeve 306, a cut which is at first a continuation of the cut imposed on the counterplate 302 and then gradually tapers 310 axially away to the outer edge of the shoulder 304 is provided. In this situation, the diminishing of the stress created at the weld 300 is still achieved, while the groove 320 is somewhat easier to fabricate under certain circumstances.

Please replace Para. 0025 with the following paragraph:

[0025] In yet another alternative shown in FIG. 4A, a small groove 420 is cut into the outer surface of the shoulder 404 of sleeve 406. No cut is made into the counterplate 402 in order to maintain its rigidity. This weakening of the shoulder 404 makes it easier to impose the weld 400 at the seam 415 between the counterplate 402 and the sleeve 406 without distortion of the counterplate 402 due to the forces imposed by heating and later contraction of the weld 400.

Please replace Para. 0026 with the following paragraph:

[0026] Groove 420 can be anywhere along the axially outer surface of shoulder 404; however, it is preferably imposed roughly along the plane where the lower edge 430 of the counterplate will rest on an upper surface 432 of the sleeve 406. As shown by the dotted lines 440, the groove 420 may be axially extended even below this imaginary line which is defined by this intersection between counterplate surface 430 and sleeve surface 432 to further weaken the sleeve and diminish the possibility of distortion.

Please replace Para. 0027 with the following paragraph:

[0027] A further application of this same principle is shown in FIG. 4B where the outer edge region 450 of the sleeve 406 is cut away, again leaving the counterplate 402 undisturbed. The axial depth of this cut, or cut-away portion 450 of the shoulder 404 need only be far enough to weaken shoulder 404; in an exemplary approach, it extends preferably at least half the axial depth of the counterplate 402 in order to diminish the radial forces imposed on the counterplate 402 which could bow the counterplate 402.

Please replace Para. 0028 with the following paragraph:

[0028] Yet another approach to the solution to this problem is what is referred hereto as an undercut 501 shown in FIG. 5. In this figure, an undercut region 501 eliminates a portion of the junction between the inner surface 470 of shoulder 404 and the radially outer wall 472 of counterplate 402. This undercut 501 preferably starts from what would be the corner where the outer corner 480 of the counterplate 402 would rest against the corner defined by the inner surface 470 and the surface 432 of the sleeve 406 on which the counterplate 402 rests. This also has the effect of reducing the stress imposed by the weld 500 on the seam 515 by both weakening the shoulder 404 so as to provide less resistance to the contraction of the weld 500, as well as diminishing the amount of surface contact between the inner surface 470 of the sleeve [[404]] 406 and the radially outer surface 472 of the counterplate 402.